

Application No. 10/027,776
Amendment Dated October 7, 2004
In Reply to the Office Action dated July 16, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A [At least one] ballast circuit for supplying AC voltage and current to [a] at least one gas discharge lamp mounted in a troffer upon an application of DC voltage and current, said troffer having a ground connection, said circuit comprising:

a transformer including a first and a second primary windings;
first and second transistors, each having base, collector and emitter terminals, said base terminal of each of said transistors coupled to a drive terminal of said second primary winding;

a constant current flow network coupled to said drive terminal so as to maintain said circuit in an oscillating mode;

said first primary winding configured to be coupled across said at least one lamp such that a capacitance at a first end of said at least one lamp relative to said transformer is equal to a capacitance at a second end of said at least one lamp relative to said transformer, so as to reduce the common mode conducted noise; and

a current supply source coupled to said troffer ground connection.

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2. (currently amended) The [apparatus] ballast circuit of claim 1, wherein said capacitance at said first and second ends of said at least one lamp is provided by a capacitor.

3. (currently amended) The [apparatus] ballast circuit of claim 1, further comprising a DC supply voltage source coupled to said transformer for supplying a variable DC supply voltage.

4. (currently amended) The [apparatus] ballast circuit of claim 3, wherein said current supply source is a positive supply line of said DC supply voltage source.

5. (currently amended) The [apparatus] ballast circuit of claim 4, wherein said positive supply line of said DC supply voltage source is further coupled to said drive terminal via a resistor for providing start-up current.

6. (currently amended) The [apparatus] ballast circuit of claim 5, wherein said positive supply line of said DC supply voltage source is further coupled to a center tap terminal of said first primary winding.

7. (currently amended) The [apparatus] ballast circuit of claim 3, wherein said DC supply voltage source has negative and positive supply lines, said circuit further comprising:

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a capacitor coupled to and disposed between said negative and positive supply lines; and

an inductor disposed in said negative supply line,
wherein said circuit is configured to reduce a current flow in one of said supply lines relative to said other supply line.

8. (currently amended) The [apparatus] ballast circuit of claim 1, wherein said constant current flow network further comprises an inductor coupled in series with a resistor and a diode coupled to said drive terminal of said second primary winding.